SEQUENCE LISTING

<110> Kwon, Byoung S.

<120> MURINE 4-1BB GENE

<130> 740.009US1

<140> US 08/012,269
<141> 1993-02-01

<150> US 07/922,996
<151> 1992-07-30

<150> US 07/267,572
<151> 1988-11-07

<160> 13

<170> FastSEQ for Windows Version 4.0

<210> 1
<211> 2350
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(2350)
<223> n = A,T,C or G

<400> 1
atgtccatga actgctgagt ggataaacag cacgggatat ctctgtctaa aggaatatta   60
ctacaccagg aaaaggacac attcgacaac aggaaaggag cctgtcacag aaaaccacag   120
tgtcctgtgc atgtgacatt tcgccatggg aaacaactgt tacaacgtgg tggtcattgt   180
gctgctgcta gtgggctgtg agaaggtggg agccgtgcag aactcctgtg ataactgtca   240
gcctggtact ttctgcagaa aatacaatcc agtctgcaag agctgccctc caagtacctt   300
ctccagcata ggtggacagc cgaactgtaa catctgcaga gtgtgtgcag gctatttcag   360
gttcaagaag ttttgctcct ctacccacaa cgcggagtgt gagtgcattg aaggattcca   420
ttgcttgggg ccacagtgca ccagatgtga aaaggactgc aggcctggcc aggagctaac   480
gaagcagggt tgcaaaacct gtagcttggg aacatttaat gaccagaacg gtactggcgt   540
ctgtcgaccc tggacgaact gctctctaga cggaaggtct gtgcttaaga ccgggaccac   600
ggagaaggac gtggtgtgtg accccctgt ggtgagcttc tctcccagta ccaccatttc   660
tgtgactcca gagggaggac caggagggca ctccttgcag gtccttacct tgttcctggc   720
gctgacatcg gctttgctgc tggccctgat cttcattact ctcctgttct ctgtgctcaa   780
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ggaccccacc atcctgtgga acagcacaag caacccccacc accctgttct tacacatcat   1020
cctagatgat gtgtgggcgc gcacctcatc caagtctctt ctaacgctaa catatttgtc   1080
tttacctttt ttaaatcttt ttttaaattt aaattttatg tgtgtgagtg ttttgcctgc   1140
ctgtatgcac acgtgtgtgt gtgtgtgt gtgacactcc tgatgcctga ggaggtcaga   1200
agagaaaggg ttggttccat aagaactgga gttatggatg gctgtgagcc ggnnngatag   1260
gtcgggacgg agacctgtct tcttatttta acgtgactgt ataataaaaa aaaaatgata   1320
tttcgggaat tgtagagatt ctcctgacac ccttctagtt aatgatctaa gaggaattgt   1380
tgatacgtag tatactgtat atgtgtatgt atatgtatat gtatatataa gactctttta   1440
ctgtcaaagt caacctagag tgtctggtta ccaggtcaat tttattggac attttacgtc   1500
acacacacac acacacacac acacacacgt ttatactacg tactgttatc ggtattctac   1560
gtcatataat gggatagggt aaaaggaaac caaagagtga gtgatattat tgtggaggtg   1620

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acagactacc ccttctgggt acgtagggac agacctcctt cggactgtct aaaactcccc    1680
ttagaagtct cgtcaagttc ccggacgaag aggacagagg agacacagtc cgaaaagtta    1740
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atctcacaag tttcgtccgg gctcggcgga cctatggcgt cgatccttat taccttatcc    1980
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agggtactgg gcggcccgtc gaaggccctt tggtttcaga aacccaaggc cccctcata    2280
ccaacgtttc gactttgatt cttgccggta cgtggtggtg ggtgccttag ctctttctcg    2340
atagttagac                                                          2350
```

<210> 2
<211> 256
<212> PRT
<213> Mus musculus

<400> 2
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Met Gly Asn Asn Cys Tyr Asn Val Val Val Ile Val Leu Leu Leu Val
 1               5                  10                  15
Gly Cys Glu Lys Val Gly Ala Val Gln Asn Ser Cys Asp Asn Cys Gln
            20                  25                  30
Pro Gly Thr Phe Cys Arg Lys Tyr Asn Pro Val Cys Lys Ser Cys Pro
            35                  40                  45
Pro Ser Thr Phe Ser Ser Ile Gly Gly Gln Pro Asn Cys Asn Ile Cys
        50                  55                  60
Arg Val Cys Ala Gly Tyr Phe Arg Phe Lys Lys Phe Cys Ser Ser Thr
65                  70                  75                  80
His Asn Ala Glu Cys Glu Cys Ile Glu Gly Phe His Cys Leu Gly Pro
                85                  90                  95
Gln Cys Thr Arg Cys Glu Lys Asp Cys Arg Pro Gly Gln Glu Leu Thr
            100                 105                 110
Lys Gln Gly Cys Lys Thr Cys Ser Leu Gly Thr Phe Asn Asp Gln Asn
            115                 120                 125
Gly Thr Gly Val Cys Arg Pro Trp Thr Asn Cys Ser Leu Asp Gly Arg
        130                 135                 140
Ser Val Leu Lys Thr Gly Thr Thr Glu Lys Asp Val Val Cys Gly Pro
145                 150                 155                 160
Pro Val Val Ser Phe Ser Pro Ser Thr Thr Ile Ser Val Thr Pro Glu
                165                 170                 175
Gly Gly Pro Gly Gly His Ser Leu Gln Val Leu Thr Leu Phe Leu Ala
            180                 185                 190
Leu Thr Ser Ala Leu Leu Leu Ala Leu Ile Phe Ile Thr Leu Leu Phe
            195                 200                 205
Ser Val Leu Lys Trp Ile Arg Lys Lys Phe Pro His Ile Phe Lys Gln
        210                 215                 220
Pro Phe Lys Lys Thr Thr Gly Ala Ala Gln Glu Glu Asp Ala Cys Ser
225                 230                 235                 240
Cys Arg Cys Pro Gln Glu Glu Glu Gly Gly Gly Gly Gly Tyr Glu Leu
            245                 250                 255
```

<210> 3
<211> 24
<212> PRT
<213> Mus musculus

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<400> 3
Cys Arg Val Cys Ala Gly Tyr Phe Arg Phe Lys Lys Phe Cys Ser Ser
 1               5                   10                  15
Thr His Asn Ala Glu Cys Glu Cys
            20


<210> 4
<211> 22
<212> PRT
<213> Drosophila

<400> 4
Cys Pro Val Cys Phe Asp Tyr Val Ile Leu Gln Cys Ser Ser Gly His
 1               5                   10                  15
Leu Val Cys Val Ser Cys
            20


<210> 5
<211> 26
<212> PRT
<213> Dictyostelium

<400> 5
Cys Pro Ile Cys Phe Glu Phe Ile Tyr Lys Lys Gln Ile Tyr Gln Cys
 1               5                   10                  15
Lys Ser Gly His His Ala Cys Lys Glu Cys
            20                  25


<210> 6
<211> 6
<212> PRT
<213> Mus musculus

<220>
<221> SITE
<222> (1)...(6)
<223> Xaa = Any Amino Acid

<400> 6
Val Gln Asn Ser Xaa Asp
 1               5


<210> 7
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificial peptide

<400> 7
Cys Arg Pro Gly Gln Glu Leu Thr Lys Ser Gly Tyr
 1               5                   10


<210> 8
<211> 24
<212> PRT
<213> Artificial Sequence
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```
<220>
<223> A conserved pattern

<221> SITE
<222> (1)...(24)
<223> Xaa = Any Amino Acid

<400> 8
Cys Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa
 1               5                   10                  15
Xaa His Xaa Xaa Xaa Cys Xaa Cys
            20

<210> 9
<211> 4
<212> PRT
<213> Mus musculus

<400> 9
Cys Arg Cys Pro
 1

<210> 10
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> A consensus sequence

<221> SITE
<222> (1)...(4)
<223> Xaa = Any Amino Acid

<400> 10
Cys Xaa Cys Pro
 1

<210> 11
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> A primer

<400> 11
acctcgaggt cctgtgcatg tgaca                                      25

<210> 12
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> A primer

<400> 12
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4

atgaattctt actgcaggag tgccc   25

<210> 13
<211> 11
<212> PRT
<213> Mus musculus

<400> 13
Cys Arg Pro Gly Gln Glu Leu Thr Lys Gln Gly
 1   5   10